

REMARKS

Claims 21-35 were finally in the Office Action mailed 19 December 2002. This amendment cancels claims 28-35 without prejudice to consideration in a continuing application and adds claims 36-45 to further define inventive aspects of the present application.

Reconsideration of the present application in view of the following comments is respectfully requested.

With regard to the final rejection of claims 21-28, the remarks of the prior response mailed on 27 June 2002 are hereby incorporated by reference and are further supplemented by the remarks that follow. As noted in the prior response, the Matsuura reference focuses on the ease with which moisture can infiltrate SiOF films (see Col. 1, lines 27-57). In reply, the Office Action cites Col. 3, lines 55+ as disclosing SiF. As a careful reading of this citation will reveal, SiF₄ gas is recited along with other gaseous processing materials. SiF₄ gas does not disclose a hydrophobic material layer of a via structure as recited in independent claim 21. Furthermore, there is discussion implying that the Applicant is importing limitations from the specification; however, the prior Office Action (mailed 27 February 2002) cited SiF in parenthesis as a form of hydrophobic material disclosed by Matsuura (see 2nd paragraph on p. 3). The Applicant's response merely pointed out why such disclosure is absent, without any suggestion that the hydrophobic material cited in the claims is somehow limited to SiF.

The Office Action also notes that the term "hydrophobic" has not been defined in a way that it would differentiate the invention from the prior art -- suggesting that some quantifiable degree as to extent is required. It is respectfully submitted that those of ordinary skill in the art

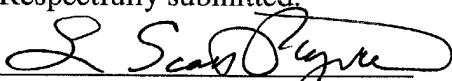
would recognize "hydrophobic" as a structural/compositional feature. As such, it should be given patentable weight in examining the claims which recite it. Likewise, the references to a SOG material connote structural/compositional features that would be recognized by those of ordinary skill in the art. It also appears that the term "hydrophobic" is asserted to be inherent because it has no weight in determining patentability. Again, it is respectfully submitted that by giving this term its proper patentable weight, it is not inherent.

Dependent claims 24 and 30 were rejected under 35 U.S.C. § 103 as being unpatentable over the Asahina et al. reference in view of the Sugiura et al. reference. The Sugiura et al. reference is relied upon to teach CCl_4 . However, in the Sugiura et al. reference, the use of this compound in the cited columns 62-63 is merely for the purpose of etching -- not for the formation of a hydrophobic material as recited in the claims rejected by the Asahina/Sugiura combination.

Claims 36-45 are directed to subject matter not previously submitted in the form of claims, and are directed to further inventive aspects of the present application. Claims 36-45 are believed to be patentable over the art of record.

In view of the foregoing, it is believed that claims 21-27 and 36-45 are in condition for allowance. Reconsideration of the present application as amended is respectfully requested.

Respectfully submitted:



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